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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,099

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Antonie Selis van de Bovenkamp

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EXAMINER

BANH, DAVID H

ART UNIT

PAPER NUMBER

2854

NOTIFICATION DATE

DELIVERY MODE

03/29/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,099	<b>Applicant(s)</b> VAN DE BOVENKAMP, ANTONIE SELIS	
	<b>Examiner</b> DAVID BANH	<b>Art Unit</b> 2854	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,9-15 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,9-15 and 17-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 15, 2009 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 2, 4, 9-15 and 17-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claim 14 is objected to because of the following informalities: The recitation "different diameters of the plate cylinders" lacks antecedent basis. A plurality of plate cylinders is not disclosed and it believed that the printing module only comprises a single mounted plate cylinder. Additionally, the recitation "diameters matching the plate cylinders" lacks antecedent basis as a plurality of plate cylinders it not disclosed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 9-11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto (US PG Pub 2003/0061956) in view of Mailänder (US Patent 5,683,512).

For claims 1 and 23: Tsukamoto teaches a printing machine comprising a printing module **10** comprising an impression roller **17** being rotatably mounted (see Fig. 1, the impression cylinder **17** is shown to be rotating by the arrow), a plate cylinder assembly (see Fig. 1, frame **F**, cylinder **16** and shaft **16A**) having a plate cylinder **16** that is provided with a print image and that, in use, with the interposition of a substrate **P** abuts against the impression roller **17** (see Fig. 1, the plate cylinder **16** is shown, any plate cylinder has an image and the plate cylinder **16** is shown contacting the paper **P** and the impression roller **17**), an ink reservoir **11**, a doctor roller **13** configured to take ink **I** up from the ink reservoir **11** (see Fig. 1), an anilox roller **15** being arranged between the doctor roller **13** and the plate cylinder **16** configured to remove a desired amount of ink from the doctor roller and transfer ink **I** to the plate cylinder **16** (see Fig. 1, the anilox roller is arranged between the doctor and the plate, and thus transfers a quantity of ink from one to the other), a first subframe **F** in which the plate cylinder **16** is rotatably mounted (see Fig. 1, the arrow indicates the rotation of the plate cylinder **16**), and a second subframe **F1** in which the anilox roller **15** and the doctor roller **13** are rotatably mounted (see Fig. 1, again the arrows indicate rotation). Tsukamoto does not teach or show that the impression roller is mounted on a main frame, nor does it shown that the first subframe is pivotably mounted on the main frame through a first pivot, and

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the second subframe is pivotably connected to the main frame through a second pivot such that a positioning change of the plate cylinder relative to the impression roller does not affect the positioning of the anilox roller relative to the plate cylinder and that a positioning change of the anilox roller relative to the plate cylinder does not affect the positioning of the plate cylinder relative to the impression roller. However, Mailänder teaches a main frame **11** and an impression roller **14** rotatably mounted on the main frame **11**, a first subframe for mounting a cylinder **15** for rotation (see Fig. 2 and the arrow), that is pivotably connected to the main frame **11** through a first pivot **12** for positioning the cylinder **15** relative to the impression roller **14**, and a second subframe **17** in which an coating unit **23** comprising a varnish reservoir **25** and varnish taking-up and metering rollers **18**, **28** are rotatably mounted, the second subframe **17** being pivotably connected to the main frame **16** (see Fig. 2, the second subframe is pivotably connected to the first subframe which is connected to the main frame, thus the second subframe can pivot relative to the main frame), such that a positioning change of the cylinder **15** relative to the impression roller **14** (actuated by pivoting the first subframe **10** only relative to the main frame **11**) does not change the positioning of varnishing roller **18** relative to the cylinder **15** and a positioning change of the varnishing roller **18** relative to the cylinder **15** does not change the positioning of the cylinder **15** relative to the impression roll **14**. It would have been obvious to one of ordinary skill in the art at the time the invention was made to dispose the printing cylinder, inking unit and impression roller as taught by Tsukamoto in the first subframe, second subframe and

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main frames as taught by Mailänder for the purpose of being able to precisely adjust the relative pressures between the cylinders to evenly transfer ink.

For claim 9: The combination of Tsukamoto and Mailänder teaches the printing module of claim 1 and Mailänder further teaches a first piston cylinder assembly **19** which has a first end connected to a main frame **11** and a second end connected to the first subframe **10** (see Fig. 2) such that the pressure which the plate cylinder exerts in use on the impression roller is settable with the aid of the piston cylinder assembly **19** (see column 3, lines 10-15).

For claim 10: The combination of Tsukamoto and Mailänder teaches the printing module of claim 1 further comprising a second piston cylinder assembly **22** which has a first end connected with the main frame (see Fig. 2, the first end is connected indirectly to the main frame by being connected to the first subframe, which is then connected to the main frame, alternatively, the main frame can be considered to comprise all of the subframes), and a second end connected with the second subframe (see Fig. 2), such that with the aid of the second piston cylinder assembly, the second subframe is adjustable relative to the mainframe (see column 3, lines 15-30, the second piston cylinder **22** is a positioning cylinder, which adjusts the position of the second subframe, and, as the main frame remains stationary, this adjusts the positioning of the second subframe relative to the mainframe).

For claim 11: The combination of Tsukamoto and Mailänder teaches the printing module of claim 1 further comprising a second piston cylinder assembly **22** which has a first end connected with the first subframe **10** and a second end connected with the

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second subframe **17** such that with the aid of the second piston cylinder assembly **22**, the second subframe is adjustable relative to the first subframe (see column 3, lines 13-16, the piston **22** is a positioning device).

6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto (US PG Pub 2003/0061956) and Mailänder (US Patent 5,683,512) as applied to claim 1 above, and further in view of Stuchlik et al. (US Patent 6,006,665).

For claim 2: The combination of Tsukamoto and Mailänder teaches all of the limitations of claim 2 except for a stop surface that is provided on the plate cylinder assembly and a stop that is provided on the second subframe and abuts against the stop surface, the position being settable relative to the second subframe. However, Stuchlik et al. teaches a stop surface provided on the plate cylinder (see Fig. 1, the trapezoidal surface on the top of plate cylinder 18), a stop 52 provided on the second subframe 30 and abuts the stop surface of the plate cylinder in use (column 2, lines 37-45, the stop abuts the stop surface to maintain the positioning of the anilox cylinder with the plate cylinder, the anilox cylinder being position with end plate 30). Finally, the position of the stop is set relative to the frame as it is given a specific location as seen in Fig. 1. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a stop surface on the plate cylinder and a stop on the subframe to maintain the relative position of the anilox cylinder and the plate cylinder to prevent an excess of ink from being applied to the plate cylinder.

For claim 4: The combination of Tsukamoto, Mailänder and Stuchlik et al. teaches all of the limitations of claim 2 and further Stuchlik et al. teaches a stop surface

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provided on the plate cylinder assembly (as taught for the claim above), a portion of the stop surface being settable relative to the plate cylinder (see Fig. 1, the stop surface is set in position relative to the plate cylinder), and a stop that is provided on the second subframe and abuts the surface of the plate cylinder (see Fig. 1 and column 2, lines 37-45 as above).

7. Claims 12, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto (US PG Pub 2003/0061956) and Mailänder (US Patent 5,683,512) as applied to claim 1 above, and further in view of Ishii (US Patent 4,879,950).

For claim 12: The combination of Tsukamoto and Mailänder teaches all of the limitations of claim 12 except a stationary shaft on which the plate cylinder is mounted, stop rings provided on opposite sides of the plate cylinder fixed connected to a stationary shaft and a supporting ring connected to the stationary shaft on opposite sides of the cylinder. However, Ishii teaches a stationary shaft **102** on which the plate cylinder **101** is mounted, a first stop ring **112** and corresponding a second stop ring **113** provided on opposite sides of the printing cylinder **101** on the shaft **102** and supporting rings **103**, **104** being bearings connected to the shaft **102** on opposite sides of said cylinder **101** (see Fig. 9, and correspondingly column 6, lines 30-42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a stationary shaft **102** with stop rings **112**, **113** and supporting rings **102**, **103** connected to the shaft for the purpose of securely and rotatably holding the cylinder onto the frame. It should be noted that the surface of a stop ring is a stop surface.



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For claim 13: The combination of Tsukamoto, Mailänder and Ishii teaches the printing module of claim 12 and Ishii further teaches a first subframe **105, 106** that further comprises two receiving units **109, 110** disposed on opposite sides of the plate cylinder **101** configured to receiving the support rings **103, 104** when the plate cylinder is in an operative position (see Figs. 9 and 10, the frames comprise bearings **109, 110** that indirectly receive the support rings.

For claim 14: The combination of Tsukamoto, Mailänder and Ishii teaches the printing module of claim 13 wherein Ishii further shows a support surface provided with a particular curve on the receiving units **109, 110** (the units have a surface with some type of curve). Since the distance between the anilox roller and impression roller and plate cylinder are all adjustable, the curve is such that the distances are capable of being made equal.

8. Claims 15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto (US PG Pub 2003/0061956), Mailänder (US Patent 5,683,512), and Ishii (US Patent 4,879,950) as applied to claim 13 above, and further in view of Washchynsky et al. (US Patent 4,878,427).

For claim 15: The combination of Tsukamoto, Mailänder and Ishii teaches all of the limitations of claim 15 except fixation means configured to fixate a plate cylinder assembly in the receiving units, the fixation means located under the plate cylinder assembly. However, Washchynsky et al. teaches fixation means (see Fig. 5) for a cylinder about the cylinder axis **102** (see column 6, lines 35-40), the fixation means having a rod **128** at an upwardly directed end provided with a hook **94** (see Fig. 5), the

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hook engaged to that stationary shaft of the cylinder **102** while a pull force is exerted on the rod **128** to press cylinder into a receiving unit **112**. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the plate assembly of the combination of Tsukamoto, Mailänder and Ishii with a pair of hook and rod mechanisms for moving the cylinder on both ends of the cylinder shaft for the purpose of moving the cylinder in and out of an operating position.

For claim 17: The combination of Tsukamoto, Mailänder, Ishii and Washchynsky et al. teaches the printing module of claim 15 and Washchynsky et al. further comprising two piston cylinder assemblies **122**, **124**, **126** each connected to one of the two rods at an end of the rod remote from the hook, each assembly being configured to adjust the position of the associated rod and to exert a pulling force (see Fig. 5 and column 7, lines 1-5).

For claim 18: The combination of Tsukamoto, Mailänder and Washchynsky et al. teaches the printing module of claim 15 and Washchynsky et al. further teaches that the fixation means further comprises bearing surfaces configured to support the assembly when the fixation means are in a release position in which the plate assembly is lifted out of the receiving units such that the plate cylinder assembly can be taken out of the printing module (hook **92** being a bearing, see column 6, lines 35-45, has a surface on which the cylinder and cylinder shaft rest).

For claim 19: The combination of Tsukamoto, Mailänder, Ishii and Washchynsky et al. teaches the printing module of claim 15 and Washchynsky et al. teaches that each rod is provided with a bearing surface (see Fig. 5, hook **92** is a bearing and has a

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surface, column 3, lines 35-45), and is configured such that upon upward movement of the rod, the bearing surface automatically enters into engagement with the shaft and lifts the plate cylinder (if the rod is moved, the hook will contact the plate cylinder shaft and is capable of moving the plate cylinder assembly).

For claim 20: The combination of Tsukamoto, Mailänder, Ishii and Washchynsky et al. teaches the printing module of claim 15 and Mailänder shows that a portion of the first subframe extends above a region for receiving units for the shaft of the plate cylinder, which constitutes a receiving means for mounting additional processing means (see Fig. 2, a portion of the first subframe can be used to mount additional processing means and thus is a receiving means).

For claim 21: The combination of Tsukamoto, Mailänder, Ishii and Washchynsky et al. teaches the printing module of claim 20 and Mailänder teaches receiving means which comprises two guides (the frame of the printing unit is constituted by two frame walls on either end to hold the shafts on the cylinder **15** and thus each frame wall constitutes one of the two guides).

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukamoto (US PG Pub 2003/0061956), Mailänder (US Patent 5,683,512), Ishii (US Patent 4,879,950) and Washchynsky et al. (US Patent 4,878,427) as applied to claim 20 above, and further in view of Korem (US Patent 6,125,751).

For claim 22: The combination of Tsukamoto, Mailänder, Ishii and Washchynsky et al. teaches all of the limitations of claim 22 except that the additional processing means comprises at least one of a substrate web inverting unit, a winder and a

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laminating unit. However, Korem teaches a substrate web inverting unit **33** (see Fig. 1) for inverting a web to allow it to be printed on both sides. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a web inverting unit in the frame of the printing unit above the receiving units to invert the web substrate for the purpose of allowing the web to be printed on either side or both sides.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID BANH whose telephone number is (571)270-3851. The examiner can normally be reached on M-F 9:30AM - 8PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Ren L Yan/  
Primary Examiner, Art Unit 2854